impedance of the network approximately matches transmission impedance of the signal lead of the optoelectronic device.

38. The optoelectronic assembly of claim 37, wherein the at least one electrical component includes a resistor.

39. The optoelectronic assembly of claim 37, wherein the at least one electrical component includes a capacitor.

40. The optoelectronic assembly of claim 37, wherein the at least one electrical component includes a capacitor and a resistor.

41. The optoelectronic assembly of claim 40, further including

a circuit interconnect coupled to the optoelectronic device and the transistor outline package, the circuit interconnect having an associated transmission impedance, wherein the circuit interconnect is configured so that, for operation in a predefined range of frequencies above 3 GHz, the transmission impedance of the circuit interconnect approximately matches the transmission impedance of the signal lead of the optoelectronic device.

42. The optoelectronic assembly of claim 37, further including

a circuit interconnect coupled to the optoelectronic device and the transistor outline package, the circuit interconnect having an associated transmission impedance, wherein the circuit interconnect is configured so that, for operation in a predefined range of frequencies above 3 GHz, the transmission impedance of the circuit interconnect approximately matches the transmission impedance of the signal lead of the optoelectronic device.

43. The optoelectronic assembly of claim 37, wherein the base of the optoelectronic device includes a concentric dielectric ring situated around the signal lead, electrically isolating the signal lead from the base, and a concentric ground ring situated around the dielectric ring, the concentric ground ring forming a direct contact with the conductor of the circuit interconnect.

44. The optoelectronic assembly of claim 37, wherein the transistor outline package includes a pedestal shaped to be concentrically positioned around at least a portion of the signal lead.

45. The optoelectronic assembly of claim 44, further including

a circuit interconnect coupled to the optoelectronic device and the transistor outline package, the circuit interconnect having an associated transmission impedance, wherein the circuit interconnect is configured so that, for operation in a predefined range of frequencies above 3 GHz, the transmission impedance of the circuit interconnect approximately matches the transmission impedance of the signal lead of the optoelectronic device.